

(iii) Toughness

(iv) Hardness.

- (b) Why Allowances are given on Patterns ? What are its different types ? Explain.
- (c) Draw a labelled diagram of Lathe Machine. List various operations performed on Lathe.
- (d) Differentiate between Soldering and Brazing. Give their composition and uses.
- (e) Write a note on the following :
- (i) Plastics and their application
 - (ii) Process type Plant layout.

SECTION—C

3. Question (a) is compulsory and carries **seven** marks. Attempt **three** more questions from the remaining (all carry **six** marks) :

(25)

- (a) What do you understand by classification of Welding Processes ? Explain in detail.
- (b) List various important properties of moulding sand. Explain the importance of each property.
- (c) Explain in detail Drawing Process giving suitable diagram. Also list various items produced by this process.
- (d) Draw labelled diagram of a mould box showing pattern, gates, runner and riser. What do you understand by directional solidification of casting ?
- (e) List various advantages of powder metallurgy. Explain the process in detail.
- (f) Write a detailed note on the impact of Materials and Manufacturing on the development of a country.

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 4302

Roll No.

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B. Tech.

(SEM. I) THEORY EXAMINATION 2011-12

MANUFACTURING PROCESSES

Time : 2 Hours

Total Marks : 50

Note :— (i) Attempt **all** questions.

(ii) Marks allotted to each question are indicated on right hand side.

SECTION—A

1. This section contains **five** short answer type questions. **All** questions are compulsory. Write short notes on the following :

(5×2=10)

- (a) Fatigue in metals
- (b) Hot working on metals
- (c) Casting defects
- (d) Annealing
- (e) Brasses.

SECTION—B

2. Attempt any **three** of the following :

(3×5=15)

- (a) Explain any **two** of the following :
 - (i) Ductility
 - (ii) Creep